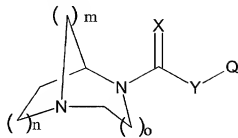


CLAIMS

1. A compound of the formula



wherein $n = 1-2$;

$m = 1-2$;

$o = 1-2$;

$X = O, S, \text{ or } NR^1$;

$Y = O, S, \text{ or } NR^1$;

R^1 is H, a straight chain or branched (C_1-C_8) alkyl, $C(=O)OR^6$, CH_2R^6 , $C(=O)NR^6R^7$,

- 10 $C(=O)R^6$, or SO_2R^6 ;

Q is a straight chain or branched (C_1-C_8) alkyl, a straight chain or branched (C_2-C_8) alkenyl, a straight chain or branched (C_2-C_8) alkynyl, (C_3-C_8) cycloalkyl, (C_4-C_8) cycloalkenyl, 3-8 membered heterocycloalkyl, (C_5-C_{11}) bicycloalkyl, (C_7-C_{11}) bicycloalkenyl, 5-11 membered heterobicycloalkyl, 5-11 membered heterobicycloalkenyl, (C_6-C_{11}) aryl or 5-12 membered

- 15 heteroaryl; wherein Q is optionally substituted with one to six substituents R^2 independently selected from H, F, Cl, Br, I, nitro, cyano, CF_3 , $-NR^3R^4$, $-NR^3C(=O)R^4$, $-NR^3C(=O)NR^4R^5$, $-NR^3S(=O)_2R^4$, $-NR^3S(=O)_2NR^4R^5$, $-OR^3$, $-OC(=O)R^3$, $-OC(=O)OR^3$, $-OC(=O)NR^3R^4$, $-OC(=O)SR^3$, $-C(=O)OR^3$, $-C(=O)R^3$, $-C(=O)NR^3R^4$, $-SR^3$, $-S(=O)R^3$, $-S(=O)_2R^3$, $-S(=O)_2NR^3R^4$, and R^3 ;

- 20 each R^3 , R^4 , and R^5 is independently selected from H, straight chain or branched (C_1-C_8) alkyl, straight chain or branched (C_2-C_8) alkenyl, straight chain or branched (C_2-C_8) alkynyl, (C_3-C_8) cycloalkyl, (C_4-C_8) cycloalkenyl, (3-8 membered) heterocycloalkyl, (C_5-C_{11}) bicycloalkyl, (C_7-C_{11}) bicycloalkenyl, 5-11 membered heterobicycloalkyl, 5-11 membered heterobicycloalkenyl, (C_6-C_{11}) aryl and 5-12 membered heteroaryl; wherein R^3 , R^4 , and R^5 ,

- 25 when not = H, are each independently optionally substituted with from one to six substituents, independently selected from F, Cl, Br, I, nitro, cyano, CF_3 , $-NR^6R^7$, $-NR^6C(=O)R^7$, $-NR^6C(=O)NR^7R^8$, $-NR^6S(=O)_2R^7$, $-NR^6S(=O)_2NR^7R^8$, $-OR^6$, $-OC(=O)R^6$, $-OC(=O)OR^6$, $-OC(=O)NR^6R^7$, $-OC(=O)SR^6$, $-C(=O)OR^6$, $-C(=O)R^6$, $-C(=O)NR^6R^7$, $-SR^6$, $-S(=O)R^6$, $-S(=O)_2R^6$, $-S(=O)_2NR^6R^7$, straight chain or branched (C_1-C_8) alkyl, straight chain or branched (C_2-C_8) alkenyl, straight chain or branched (C_2-C_8) alkynyl, (C_3-C_8) cycloalkyl, (C_4-C_8) cycloalkenyl, 3-8 membered heterocycloalkyl, (C_5-C_{11}) bicycloalkyl, (C_7-C_{11}) bicycloalkenyl,
- 30

5-11 membered heterobicycloalkyl, 5-11 membered heterobicycloalkenyl, (C₆-C₁₁) aryl, 5-12 membered heteroaryl, and R⁶;

or, when R³ and R⁴ are as in NR³R⁴, they may instead optionally be connected to form with the nitrogen of NR³R⁴ to which they are attached a heterocycloalkyl moiety of from three to seven ring members, said heterocycloalkyl moiety optionally comprising one or two further heteroatoms independently selected from NR⁵, O, S;

each R⁶, R⁷, and R⁸ is independently selected from H, straight chain or branched (C₁-C₈)alkyl, straight chain or branched (C₂-C₈)alkenyl, straight chain or branched (C₂-C₈)alkynyl, (C₃-C₈)cycloalkyl, (C₄-C₈)cycloalkenyl, 3-8 membered heterocycloalkyl, (C₅-C₁₁)bicycloalkyl, (C₇-C₁₁)bicycloalkenyl, 5-11 membered heterobicycloalkyl, 5-11 membered heterobicycloalkenyl, (C₆-C₁₁) aryl and (5-12 membered heteroaryl; wherein R⁶, R⁷, and R⁸ are each independently optionally substituted with from one to six substituents, independently selected from F, Cl, Br, I, nitro, cyano, CF₃, -NR⁹R¹⁰, -NR⁹C(=O)R¹⁰, -NR⁹C(=O)NR¹⁰R¹¹, -R⁹S(=O)₂R¹⁰, -NR⁹S(=O)₂NR¹⁰R¹¹, -OR⁹, -OC(=O)R⁹, -OC(=O)OR⁹, -OC(=O)NR⁹R¹⁰, -OC(=O)SR⁹, -C(=O)OR⁹, -C(=O)R⁹, -C(=O)NR⁹R⁷, -SR⁹, -S(=O)R⁹, -S(=O)₂R⁹, -S(=O)₂NR⁹R⁷, straight chain or branched (C₁-C₈)alkyl, straight chain or branched (C₂-C₈)alkenyl, straight chain or branched (C₂-C₈)alkynyl, (C₃-C₈)cycloalkyl, (C₄-C₈)cycloalkenyl, 3-8 membered heterocycloalkyl, (C₅-C₁₁)bicycloalkyl, (C₇-C₁₁)bicycloalkenyl, 5-11 membered heterobicycloalkyl, (5-11 membered) heterobicycloalkenyl, (C₆-C₁₁) aryl, 5-12 membered heteroaryl, and R⁹;

each R⁹, R¹⁰, and R¹¹ is independently selected from H, straight chain or branched (C₁-C₈)alkyl, straight chain or branched (C₂-C₈)alkenyl, straight chain or branched (C₂-C₈)alkynyl, (C₃-C₈)cycloalkyl, (C₄-C₈)cycloalkenyl, 3-8 membered heterocycloalkyl, (C₅-C₁₁)bicycloalkyl, (C₇-C₁₁)bicycloalkenyl, (5-11 membered heterobicycloalkyl, 5-11 membered heterobicycloalkenyl, (C₆-C₁₁) aryl and 5-12 membered heteroaryl;

with the proviso that when n is one, o is one, m is two, X is oxygen and Y is oxygen or NR¹, then Q can not be unsubstituted phenyl or phenyl substituted only with one or more substituents selected from the group consisting of halo, trifluoromethyl, trifluoromethoxy, cyano, hydroxy, (C₁-C₈) alkyl, (C₁-C₈) alkoxy, the group -OCH₂O- attached to both the meta and para positions of the phenyl ring, the group -CH₂CH₂CH₂CH₂- attached to both the meta and para positions of the phenyl ring, and phenoxy or phenyl wherein said phenyl and the phenyl moiety of said phenoxy can optionally be substituted with one or more substituents selected from the group consisting of halo, trifluoromethyl, trifluoromethoxy, cyano, hydroxy, (C₁-C₈) alkyl, and (C₁-C₈) alkoxy;

or an enantiomeric, diastereomeric, and tautomeric isomer of such compound, or a pharmaceutically acceptable salt of such compound or isomer.

2. A compound according to claim 1, wherein X = O and Y = O or NH.

3. A compound according to claim 1, wherein Y = O.
4. A compound according to claim 1, wherein R¹ = methyl.
5. A compound according to claim 1, wherein m = 2, o = 1 and n = 1.
6. A compound according to claim 1, wherein Q is (C₆-C₁₁)aryl that is optionally substituted with from one to five substituents independently selected from H, F, Cl, Br, I, nitro, cyano, CF₃, -NR²R⁴, -NR³C(=O)R⁴, -NR³C(=O)NR⁴R⁵, -NR³S(=O)₂R⁴, -NR³S(=O)₂NR⁴R⁵, -OR³, -OC(=O)R³, -OC(=O)OR³, -OC(=O)NR³R⁴, -OC(=O)SR³, -C(=O)OR³, -C(=O)R³, -C(=O)NR³R⁴, -SR³, -S(=O)R³, -S(=O)₂R³, -S(=O)₂NR³R⁴, straight chain or branched (C₁-C₈)alkyl, straight chain or branched (C₂-C₈)alkenyl, straight chain or branched (C₂-C₈)alkynyl, 10 (C₃-C₈)cycloalkyl, (C₄-C₈)cycloalkenyl, 3-8 membered heterocycloalkyl, (C₅-C₁₁)bicycloalkyl, (C₇-C₁₁)bicycloalkenyl, 5-11 membered heterobicycloalkyl, 5-11 membered heterobicycloalkenyl, (C₆-C₁₁) aryl, 5-12 membered heteroaryl, and R³.
7. A compound according to claim 1, wherein R³ is (C₆-C₁₁)aryl or (5-12 membered) heteroaryl that is optionally substituted with from one to five substituents independently selected from H, F, Cl, Br, I, nitro, cyano, CF₃, -NR⁶R⁷, -NR⁶C(=O)R⁷, -NR⁶C(=O)NR⁷R⁸, -NR⁶S(=O)₂R⁷, -NR⁶S(=O)₂NR⁷R⁸, -OR⁶, -OC(=O)R⁶, -OC(=O)OR⁶, -OC(=O)NR⁶R⁷, -OC(=O)SR⁶, -C(=O)OR⁶, -C(=O)R⁶, -C(=O)NR⁶R⁷, -SR⁶, -S(=O)R⁶, -S(=O)₂R⁶, -S(=O)₂NR⁶R⁷, straight chain or branched (C₁-C₈)alkyl, straight chain or branched (C₂-C₈)alkenyl, straight chain or branched (C₂-C₈)alkynyl, (C₃-C₈)cycloalkyl, (C₄-C₈)cycloalkenyl, (3-8 membered) heterocycloalkyl, (C₅-C₁₁)bicycloalkyl, (C₇-C₁₁)bicycloalkenyl, (5-11 membered) heterobicycloalkyl, (5-11 membered) heterobicycloalkenyl, (C₆-C₁₁) aryl, (5-12 membered) heteroaryl, and R⁶.
8. A pharmaceutical composition for the treatment of schizophrenia in a mammal, comprising an amount of a compound according to claim 1 that is effective in treating schizophrenia and a pharmaceutically acceptable carrier.
9. A method of treating schizophrenia in a mammal, comprising administering to said mammal an amount of a compound according to claim 1 that is effective in treating schizophrenia.
10. A pharmaceutical composition for the treatment of schizophrenia in a mammal, comprising an α₇ nicotinic receptor agonizing amount of a compound according to claim 1 and a pharmaceutically acceptable carrier.
11. A method of treating schizophrenia in a mammal, comprising administering to said mammal an α₇ nicotinic receptor agonizing amount of a compound according to claim 1.
12. A pharmaceutical composition for treating a disorder or condition selected from inflammatory bowel disease (including but not limited to ulcerative colitis, pyoderma gangrenosum and Crohn's disease), irritable bowel syndrome, spastic dystonia, chronic pain, acute pain, celiac sprue, pouchitis, vasoconstriction, anxiety, panic disorder, depression, bipolar

disorder, autism, sleep disorders, jet lag, amyotrophic lateral sclerosis (ALS), cognitive dysfunction, tinnitus, hypertension, bulimia, anorexia, obesity, cardiac arrhythmias, gastric acid hypersecretion, ulcers, pheochromocytoma, progressive supramuscular palsy, chemical dependencies and addictions (e.g., dependencies on, or addictions to nicotine (and/or tobacco products), alcohol, benzodiazepines, barbituates, opioids or cocaine), headache, stroke, traumatic brain injury (TBI), psychosis, Huntington's Chorea, tardive dyskinesia, hyperkinesia, dyslexia, multi-infarct dementia, age related cognitive decline, epilepsy, including petit mal absence epilepsy, HIV induced dementia, senile dementia of the Alzheimer's type (AD), Parkinson's disease (PD), attention deficit hyperactivity disorder (ADHD) and Tourette's Syndrome in a mammal, comprising an amount of a compound according to claim 1 that is effective in treating such disorder or condition and a pharmaceutically acceptable carrier.

13. A method of treating in a mammal in need thereof a disorder or condition selected from inflammatory bowel disease (including but not limited to ulcerative colitis, pyoderma gangrenosum and Crohn's disease), irritable bowel syndrome, spastic dystonia, chronic pain, acute pain, celiac sprue, pouchitis, vasoconstriction, anxiety, panic disorder, depression, bipolar disorder, autism, sleep disorders, jet lag, amyotrophic lateral sclerosis (ALS), cognitive dysfunction, tinnitus, hypertension, bulimia, anorexia, obesity, cardiac arrhythmias, gastric acid hypersecretion, ulcers, pheochromocytoma, progressive supramuscular palsy, chemical dependencies and addictions (e.g., dependencies on, or addictions to nicotine (and/or tobacco products), alcohol, benzodiazepines, barbituates, opioids or cocaine), headache, stroke, traumatic brain injury (TBI), psychosis, Huntington's Chorea, tardive dyskinesia, hyperkinesia, dyslexia, multi-infarct dementia, age related cognitive decline, epilepsy, including petit mal absence epilepsy, HIV induced dementia, senile dementia of the Alzheimer's type (AD), Parkinson's disease (PD), attention deficit hyperactivity disorder (ADHD) and Tourette's Syndrome, comprising administering to said mammal an amount of a compound according to claim 1 that is effective in treating such disorder or condition.

14. A pharmaceutical composition for treating a disorder or condition selected from inflammatory bowel disease (including but not limited to ulcerative colitis, pyoderma gangrenosum and Crohn's disease), irritable bowel syndrome, spastic dystonia, chronic pain, acute pain, celiac sprue, pouchitis, vasoconstriction, anxiety, panic disorder, depression, bipolar disorder, autism, sleep disorders, jet lag, amyotrophic lateral sclerosis (ALS), cognitive dysfunction, tinnitus, hypertension, bulimia, anorexia, obesity, cardiac arrhythmias, gastric acid hypersecretion, ulcers, pheochromocytoma, progressive supramuscular palsy, chemical dependencies and addictions (e.g., dependencies on, or addictions to nicotine (and/or tobacco products), alcohol, benzodiazepines, barbituates, opioids or cocaine), headache, stroke, traumatic brain injury (TBI), psychosis, Huntington's Chorea, tardive dyskinesia, hyperkinesia, dyslexia, multi-infarct dementia, age related cognitive decline, epilepsy, including petit mal

absence epilepsy, HIV induced dementia, senile dementia of the Alzheimer's type (AD), Parkinson's disease (PD), attention deficit hyperactivity disorder (ADHD) and Tourette's Syndrome in a mammal, comprising an $\alpha 7$ nicotinic receptor agonizing amount of a compound according to claim 1 and a pharmaceutically acceptable carrier.

5 15. A method of treating in a mammal in need thereof a disorder or condition selected from inflammatory bowel disease (including but not limited to ulcerative colitis, pyoderma gangrenosum and Crohn's disease), irritable bowel syndrome, spastic dystonia, chronic pain, acute pain, celiac sprue, pouchitis, vasoconstriction, anxiety, panic disorder, depression, bipolar disorder, autism, sleep disorders, jet lag, amyotrophic lateral sclerosis
10 (ALS), cognitive dysfunction, tinnitus, hypertension, bulimia, anorexia, obesity, cardiac arrhythmias, gastric acid hypersecretion, ulcers, pheochromocytoma, progressive supramuscular palsy, chemical dependencies and addictions (e.g., dependencies on, or addictions to nicotine (and/or tobacco products), alcohol, benzodiazepines, barbituates, opioids or cocaine), headache, stroke, traumatic brain injury (TBI), psychosis, Huntington's
15 Chorea, tardive dyskinesia, hyperkinesia, dyslexia, multi-infarct dementia, age related cognitive decline, epilepsy, including petit mal absence epilepsy, HIV induced dementia, senile dementia of the Alzheimer's type (AD), Parkinson's disease (PD), attention deficit hyperactivity disorder (ADHD) and Tourette's Syndrome, comprising administering to said mammal an $\alpha 7$ nicotinic receptor agonizing amount of a compound according to claim 1.

20 16. A compound according to claim 1 that is selected from the following compounds and their pharmaceutically acceptable salts:

- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-pyridin-2-yl-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-pyridin-3-yl-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-pyridin-4-yl-phenyl ester;
- 25 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 2-nitro-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid naphthalen-2-yl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid O-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-methoxycarbonyl-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 6-bromo-naphthalen-2-yl ester;
- 30 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid methyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid isobutyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid pyridin-2-yl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid pyridin-3-yl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid octyl ester;
- 35 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-benzoyloxy-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-methylsulfanyl-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-indan-1-yl-phenyl ester;

- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-furan-3-yl-phenyl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-(6-fluoro-pyridin-3-yl)-phenyl
 ester;
- 5 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-benzoyl-phenyl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-benzyl-phenyl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-imidazol-1-yl-phenyl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-benzoyloxy-phenyl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-[1,2,4]triazol-1-yl-phenyl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-(4-acetyl-piperazin-1-yl)-phenyl
 ester;
- 10 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 2-benzooxazol-2-yl-phenyl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 2-benzothiazol-2-yl-phenyl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 2-benzyl-phenyl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3-benzoyl-phenyl ester;
- 15 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-(5-ethoxycarbonyl-pyridin-3-yl)-
 phenyl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4'-nitro-biphenyl-4-yl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 2'-nitro-biphenyl-4-yl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-(6-methyl-pyridin-2-yl)-phenyl
 ester;
- 20 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-(3,5-dimethyl-isoxazol-4-yl)-
 phenyl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-(4-methyl-pyridin-2-yl)-phenyl
 ester;
- 25 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-(5-carbamoyl-pyridin-3-yl)-phenyl
 ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-(5-cyano-pyridin-3-yl)-phenyl
 ester;
- 30 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3'-nitro-biphenyl-4-yl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-imidazo[1,2-a]pyridin-3-yl-phenyl
 ester;
- 35 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3-nitro-phenyl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid ethyl ester;
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid propyl ester; and
 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3-pyridin-3-yl-phenyl ester.

17. A compound according to claim 1 that is selected from the following compounds and their pharmaceutically acceptable salts:

- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid (4-bromo-phenyl)amide;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-cyano-phenyl ester;
- 5 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-iodo-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 2'-methoxy-biphenyl-4-yl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3'-methoxycarbonyl-biphenyl-4-yl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-tert-butyl-phenyl ester;
- 10 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-trifluoromethyl-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 2-chloro-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 2-iodo-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4'-cyano-biphenyl-4-yl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4'-bromo-biphenyl-4-yl ester;
- 15 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 2-trifluoromethyl-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3-fluoro-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3-chloro-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3-bromo-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3-tert-butyl-phenyl ester;
- 20 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3-iodo-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3-phenoxy-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3'-methyl-biphenyl-4-yl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4'-chloro-biphenyl-4-yl ester;
- 25 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 2'-methyl-biphenyl-4-yl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 2'-chloro-biphenyl-4-yl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3'-chloro-biphenyl-4-yl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3'-cyano-biphenyl-4-yl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4'-methoxy-biphenyl-4-yl ester;
- 30 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid biphenyl-3-yl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-bromo-3,5-dimethyl-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-bromo-3-methyl-phenyl ester;
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-bromo-3-chloro-phenyl ester; and
- 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 3,4-dimethyl-phenyl ester.

18. A compound according to claim 1 that is selected from the following compounds and their pharmaceutically acceptable salts:

and

5 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 2',3'-dimethyl-biphenyl-4-yl ester.

19. A compound according to claim 1 that is 1,4-Diaza-bicyclo[3.2.2]nonane-4-carboxylic acid 4-cyclohexyl-phenyl ester or a pharmaceutically acceptable salt thereof.

20. A compound according to claim 1 that is 1,4-Diaza-bicyclo[3.2.2]nonane-4-
10 carboxylic acid 4-bromo-phenyl ester or a pharmaceutically acceptable salt thereof.